STANDARDS CHANGES CATALOG (SCC)

SCC NUMBER: SCC #156

CHANGE PROPOSAL TITLE: Order-of-bit transmission Clarification, Paragraph 5.3.4.3.1

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ORIGINATOR'S INTERNAL NUMBER:

AFFECTED DOCUMENT: MIL-STD-188-220C, Paragraph 5.3.4.3.1

PRECEDENCE: Routine

RECOMMENDATIONS:

RECORD OF PROCESSING

DATE:	ACTION:
22 Jan 04	Proposal/Work Item
29 Jan 04	Draft/Approved for MIL-STD-188-220C

1. STATEMENT OF THE PROBLEM:
The order-of-bit transmission for 32-bit addressing is not described in Paragraph 5.3.4.3.1.

2. PROBLEM ANALYSIS:
The order-of-bit transmission for 32-bit addressing is not specified in Paragraph 5.3.4.3.1.

3. PROPOSED SOLUTION:

Add a sentence “For four octets addressing, the single octet 32-bit marker shall be transmitted first and the actual four octets link layer address shall be transmitted in the most significant to least significant octet order (Example: dot notation address 111.122.133.144, the most significant octet 111 is transmitted first, then 122, 133,144 order).” after the fourth sentence.

4. ALTERNATIVE SOLUTIONS: None.

5. SYSTEM CHANGES REQUIRED: None.

6. CONFIGURATION ITEM DOCUMENTATION CHANGES:
MIL-STD-188-220C, Paragraph 5.3.4.3.1.~~.~~, Appendix B, page 127, item 204.3.1.d.

7. IMPACT ON INTEROPERABILITY: None.

8. IMPACT ON RELATED DOCUMENTS: None.

9. IMPLEMENTATION DATES: ~~TBD~~ Upon approval of the SCC.

10. OTHER CONSIDERATIONS: None.

11. REFERENCES: None.

12. Trouble Reports (TRs) ADDRESSED IN THIS SCC: None.

204.3.1.a	The Information Field and control field(s) shall be transmitted LSB of each octet first	5.3.4.3.1	M	Yes__ No__	
204.3.1.b	The flag shall be transmitted LSB first	5.3.4.3.1	M	Yes__ No__	
204.3.1.c	For the FCS, the MSB shall be transmitted first	5.3.4.3.1	M	Yes__ No__	
204.3.1.d	For four octets addressing, the single octet 32-bit marker shall be transmitted first and the actual four octets link layer address shall be transmitted in the most significant to least significant octet order.	5.3.4.3.1	204.2.2.1.2:M	Yes No	
204.3.1.e~~d~~	The information field octets shall be transmitted in the same order as received from the upper layers, LSB of each octet first	5.3.4.3.1	M	Yes__ No__	
204.3.2	Zero-bit Insertion Algorithm	5.3.4.3.2	M	Yes__ No__	
204.3.2.a	The occurrence of a spurious flag sequence within a frame or Transmission Header shall be prevented by employing a 0-bit insertion algorithm	5.3.4.3.2	M	Yes__ No__	
204.3.2.b	After the entire frame has been constructed, the transmitter shall always insert a 0 bit after the appearance of five 1's in the frame (with the exception of the flag fields)	5.3.4.3.2	M	Yes__ No__	
204.3.2.c	After detection of an opening flag sequence, the receiver shall search for a pattern of five 1's.	5.3.4.3.2	M	Yes__ No__	
204.3.2.d	When the pattern of five 1's appears, the sixth bit shall be examined	5.3.4.3.2	M	Yes__ No__	
204.3.2.e	If the sixth bit is a 0, the 5 bits shall be passed as data, and the 0 shall be deleted	5.3.4.3.2	M	Yes__ No__	
204.3.2.f	If the sixth bit is a 1, the receiver shall inspect the seventh bit	5.3.4.3.2	M	Yes__ No__	
204.3.2.g	If the seventh bit is a 0, a flag sequence has been received. If the seventh bit is a 1, an invalid message has been received and shall be discarded	5.3.4.3.2	M	Yes__ No__	